

10016939

FORM PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	
(Use several sheets if necessary)	
(37 CFR 1.98(d))	



ATTY. DOCKET NO. DENSE-052A

SERIAL NO. 10/016,839

C  
APPLICANT Glen E. Roeters, et al.S  
E  
FILING DATE December 14, 2001

GROUP 2829

EXAMINER INITIAL	PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
OK	3	7	2	3	9	7	7	03-27-1973	Schaufele			
	3	7	4	6	9	3	4	07-17-1973	Stein			
	4	3	7	1	9	1	2	02-1-1983	Guzik			JUN 03 2002
	4	6	3	8	3	4	8	01-20-1987	Brown et al.			
	4	7	6	1	6	8	1	09-02-1988	Reid			
	4	8	4	1	3	5	5	06-21-1989	Parks			
	4	8	5	1	6	9	5	08-25-1989	Stein, Karl-Ulrich			
	4	8	6	8	7	1	2	09-19-1989	Woodman			
	4	9	5	6	6	9	4	09-11-1990	Elda			
	5	1	1	7	2	8	2	05-26-1992	Salatino			
	5	1	2	8	8	3	1	06-07-1992	Fox, III et al.			
	5	1	9	8	8	8	8	03-30-1993	Sugano et al.			

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## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*)


EXAMINER: Initial citation considered. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

DATE CONSIDERED

3/3/05

Atty: Kim M. Stetina  
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FORM PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. DENSE-052A	SERIAL NO. 10/016,939
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Glen E. Roeters, et al.	
(37 CFR 1.98(b))		FILING DATE December 14, 2001	GROUP 175 2829

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	5	4	4	8	5	1	1	09-06-1995	Paurus et al.		
	5	4	6	6	6	3	4	11-14-1995	Baistain, Jr. et al.		
	5	5	1	4	9	0	7	05-07-1996	Moshayedi		
	5	6	0	7	5	3	8	03-04-1997	Cooke		
	5	6	1	2	5	7	0	03-16-1997	Elde et al.	JUN-06 2002	
	5	6	4	6	4	4	6	07-15-1997	Nicewamer, Jr. et al.		
	5	7	0	0	7	1	5	12-23-1997	Passch		
	5	7	1	2	7	6	7	01-27-1998	Kolzulni		
	5	7	3	1	6	3	3	03-24-1998	Clayton		
	5	7	5	9	0	4	6	06-02-1998	Ingraham et al.		
	5	8	1	8	1	0	6	10-06-1998	Kunimatsu		
	5	8	6	9	3	5	3	02-09-1999	Levy et al.		

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## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

## OTHER DOCUMENTS (including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)


EXAMINER Juris S. Jula DATE CONSIDERED 3/3/05

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(4)

1449 03/09/05 (page 3 of 4)

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FORM PTO-1449 (Modified)	U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. DENSE-052A	SERIAL NO. 10/016,539
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR 1.98(b))		APPLICANT Glen E. Roeters, et al.	
JUN 03 2002 (Use several sheets if necessary)		FILING DATE December 14, 2001	GROUP 175 2829

## PATENT DOCUMENTS

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**FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION**

		DOCUMENT NUMBER							PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
		6	-	7	7	6	4	4					YES	NO
<i>ZORTE</i>		4	2	0	9	5	6	2	03/1994	Japan			X	
		4	2	0	9	5	6	2	07/1992	Japan				X
<i>✓</i>		2	2	3	9	6	5	1	09/1990	Japan				X
<i>✓</i>		5	6	8	8	3	2	4	07/1981	Japan				X
<i>✓</i>		6	0	1	9	4	5	1	08/10/1985	Japan				X

**OTHER DOCUMENTS (including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*)**

ANONYMOUS, Organic Card Device Carrier, Research Disclosure, May 1990, Number 313  
"Megabyte per cubic inch," Defense Science, May 1988, p. 56  
"Three Dimensional Packaging," Defense Science, May 1988, p. 65  
Robert Amunroe, "Ball Grid Array Technology," EDN Products Edition, Jan 1997, pp. 23-24

## EXAMINER

**DATE CONSIDERED**

EXAMINER: Initial citation considered. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

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IDS1408STD

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PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4 of 13

Completed (if Known)

Application Number	10/016,939
Filing Date	December 14, 2001
First Named Inventor	Glen E. Roeters
Art Unit	2829
Examiner Name	David A. Zarnetke
Attorney Docket Number	DPAC-052A / AK 155574

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06/20/06

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
DAZ	US-5,817,709	6/29/1999	Johnson, et al.		
	US-5,895,970	4/20/1999	Miyoshi, et al.		
	US-5,841,721	11/24/1998	Kwon, et al.		
	US-5,805,422	9/8/1998	Otake, et al.		
	US-5,804,870	9/8/1998	Burns		
	US-5,801,439	9/1/1998	Fujisawa, et al.		
	US-5,789,815	8/4/1998	Tessier, et al.		
	US-5,783,464	7/21/1998	Burns		
	US-5,778,552	7/14/1998	Burns		
	US-5,776,797	7/7/1998	Nicewamer, Jr., et al.		
	US-5,764,497	6/9/1998	Mizumo, et al.		
	US-5,763,296	6/9/1998	Cesati, et al.		
	US-5,729,894	3/24/1998	Rostoker, et al.		
	US-5,657,537	8/19/1997	Salz, et al.		
	US-5,642,055	6/24/1997	Difranco		
	US-5,588,205	12/31/1996	Roane		
	US-5,523,695	6/4/1996	Lin		
✓	US-5,502,333	3/26/1996	Bertin, et al.		
	US-5,477,082	12/19/1995	Buckley III, et al.		
DAZ	US-5,438,224	8/1/1995	Papageorge, et al.		

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature	/David Zarnetke/	Date Considered	05/18/2006
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AUS:572852.1

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PTO/SB/08A (08-03)

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**Substitute for form 1448/PTO**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 8 of 13

Complete if Known	
Application Number	10/016,939
Filing Date	December 14, 2001
First Named Inventor	Glen E. Roeters
Art Unit	2829
Examiner Name	David A. Zameke
Attorney Docket Number	DPAC-052A / AK 155574

U.S. PATENT DOCUMENTS

Examiner Initiating Action	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (prior art)			
DAZ	US-6,313,998		11/6/2001	Kledzik	
	US-6,303,981		10/16/2001	Moden	
	US-6,097,087		8/1/2000	Farnworth, et al.	
	US-6,028,352		2/22/2000	Eide	
	US-5,925,834		7/20/1999	Lim	
	US-5,835,988		11/10/1998	Ishii	
	US-5,778,522 A		7/14/1998	Bums	
	US-5,744,827		4/28/1998	Jeong, et al.	
	US-5,677,569		10/14/1997	Choi, et al.	
	US-5,375,041		12/20/1994	McMahon	
	US-5,259,770		11/9/1993	Bates, et al.	
	US-5,243,133		9/7/1993	Engle, et al.	
	US-5,240,588		8/3/1993	Uchida	
	US-5,219,794		6/15/1993	Satch, et al.	
	US-5,158,912		10/27/1992	Kettlerman, et al.	
	US-5,122,862		6/16/1992	Kajihara, et al.	
	US-5,081,067	01/14/1992	11/4/1992	Shimm, et al. <i>SHIMIZU ET AL.</i>	
	US-5,064,762		11/12/1991	Nishiguchi	
	US-4,839,717		6/13/1989	Phy, et al.	
DAZ	US-4,758,875		7/19/1988	Fujisawa, et al.	

06/20/06

FOREIGN PATENT DOCUMENT

Examiner Signature	/David Zarneke/	Date Considered	05/18/2006
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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10016939

PTO/SB/08A (08-03)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
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Sheet 9 of 13

Information Disclosure Statement (IDS) - Completed/Unknown	
Application Number	10/016,939
Filing Date	December 14, 2001
First Named Inventor	Glen E. Roeters
Art Unit	2829
Examiner Name	David A. Zameka
Attorney Docket Number	DPAC-052A / AK 155574

List of U.S. Patent Documents Cited					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)	MM-DD-YYYY		
DAZ	US-4,722,691		2/2/1988	Giadd, et al.	
	US-4,696,525		9/29/1987	Coler, et al.	
	US-4,079,511		3/21/1978	Grabbe	
	US-3,411,122		11/12/1968	Schiller, et al.	
	US-2005/0040508 A1		2/24/2005	Lee	
	US-2005/0035440 A1		2/17/2005	Mohammed	
	US-2004/0245617 A1		12/9/2004	Damberg, et al.	
	US-2004/0238931 A1		12/2/2004	Haba, et al.	
	US-2004/0217471 (A1)		11/4/2004	Haba	
	US-2004/0203190 A1		10/14/2004	Pfleghaupt, et al.	
	US-2004/0150107 A1		8/5/2004	Cha, et al.	
	US-2004/0104470 A1		6/3/2004	Bang, et al.	
	US-2004/0031972 A1		2/19/2004	Pfleghaupt, et al.	
	US-2003/0107118 A1		6/12/2003	Pfleghaupt, et al.	
	US-2001/0013423 A1		3/21/2001	Dalal, et al.	08/16/2001
	US-Re 36,916		10/17/2000	Moshayedi	
	US-6,707,684 B1		3/16/2004	Andric, et al.	
V	US-6,492,718 B2		12/10/2002	Ohmori	
	US-6,446,158 B1		9/3/2002	Karabatsos	
DAZ	US-6,392,162 B1		5/21/2002	Karabatsos	

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List of Foreign Patent Documents Cited						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (If known)	MM-DD-YYYY			

Examiner Signature	/David Zameka/	Date Considered	05/18/2006
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1449 05/24/06 (page 9 of 20)